



## Versatility for Converged Network Delivery

- RIP, Static Routing Support
- 64 IP Routing Domains
- 8K IP Address Table
- 4 Dual-personality (RJ-45/SFP) GbE Interfaces
- Multi-layer Aware (L2/L3/L4) ACL for Security Protection
- Port Security and Enhanced 802.1x Port Authentication
- MAC Freeze and Intrusion Lock
- Back-up Power System Support
- Multi-layer Aware (L2/L3/L4) ACL for Optimized Traffic Prioritization
- 8 IEEE 802.1p Hardware Priority Queues
- WFQ, WRR and SPQ Queuing Algorithms



**48-port Managed L3  
Gigabit Switch**

**GS-2750**

### Benefits

#### Empowering Gigabit Converged Networks

For mid-sized organizations and enterprise branch offices, the ZyXEL GS-2750 eases converged application deployments and adapts to changing business needs with configuration flexibility, supports to converged network patterns and automation of intelligent network service configurations. In addition, the ZyXEL GS-2750 is optimized for high-density Gigabit Ethernet deployments and includes a diverse range of switches that meet access, aggregation and small network backbone connectivity requirements.

#### Secure Multi-Service Delivery

Cooperation of eight priority queues and the WFQ scheduling algorithm secure quality of time-sensitive applications, as different services can be assigned to a specific VLAN and configured with different priority for traffic management. The multi-layer ACL provides L2/L3/L4 indicators for conducting policy management on traffic, while IGMP snooping and MVR are supported to optimize IP multicasting applications.

#### Enhanced Multi-layer Security Protection

The GS-2750 provides strict security against intruders with mechanisms such as Intrusion Lock, MAC Freeze, Static MAC Forwarding and MAC Filtering for MAC-based protection. The 802.1Q VLAN isolates traffics into different virtual LANs to protect business-critical information, while Multi-layer ACL provides L2/L3/L4 indicators for security policy management. In terms of access authentication, 802.1x and TACACS+ are supported for centralized authentication management; 802.1x can even further facilitate the assignment of VLAN and bandwidth.

# Specifications

## System Specifications

### Standard Compliance

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Ethernet
- IEEE 802.ab 1000BASE-T Ethernet
- IEEE 802.ah 1000BASE-BX10-U Ethernet
- IEEE 802.ah 1000BASE-BX10-D Ethernet
- IEEE 802.3z
- IEEE 802.3x Flow control
- IEEE 802.1D Spanning tree protocol
- IEEE 802.1w Rapid Spanning tree protocol
- IEEE 802.1s Multiple Spanning tree protocol
- IEEE 802.1p Class of service, priority protocols
- IEEE 802.1Q VLAN tagging
- IEEE 802.1x Port Authentication
- IEEE 802.3ad LACP aggregation

### Performance

- 100 Gbps non-blocking switching fabric
- Switching Forwarding Rate 74.4 Mpps (1488000 pps/1000BASE-T/1000BASE-X/1000BASE-BX, 148800 pps/100BASE-TX)
- Wire-speed performance

### MAC and Packet Buffer

- 8K MAC entries
- 512K Packet Buffer

### Traffic Management and QoS

- Rate Limiting: Rule-based/Port-based bandwidth control, 64 kbps granularity
- Dual-Rate-Three-Color
- CIR/PIR for bandwidth control
- Port-based egress traffic shaping
- Broadcast Storm Control
- IEEE 802.1p with 8 priority queues per port for different traffic types
- WRR (Weighted Round Robin)/SPQ scheduling algorithm
- Supports DSCP
- Supports DSCP to 802.1p priority mapping
- Supports IGMP/IGMP snooping v1 v2 v3
- Supports MVR
- Congestion control on all ports

### IP Routing and Service Features

- 64 IP routing domains
- 8K IP address table
- Wire-speed IP forwarding
- RIP v1, v2
- Static Routing
- IGMP v1, v2, v3
- Support DHCP Server/Relay

### Link Aggregation

- IEEE 802.3ad LACP link aggregation compliant
- Support static manually port trunking
- Up to 6 aggregation groups, 8 ports/per group randomly selected

### Resilient Network

- IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
- IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
- BPS (Backup Power System)

### User Security and Authentication

- IEEE 802.1Q tag-based and port-based VLAN
- Support GVRP, automatic VLAN member registration
- 256 static VLAN, up to 4K dynamic VLAN
- Full range 4K PVID support
- Port-base VLAN & VLAN isolation
- IP Classification VLAN
- Intrusion Lock
- MAC Freeze
- MAC filtering per port secures access to each port
- Specific MAC forwarding per port: only specified MAC addresses can access the network (Port Security)
- Limited MAC number per port
- IP Source Guard
- Loop Guard
- RADIUS MAC login
- IP Filtering
- TCP/UDP Socket Filtering
- BPDU transparency
- 802.1x port-based authentication, compensated assignment over VLAN and bandwidth for valid access
- TACACS+

### Network Administration Security

- User name/password required for Web/Telnet/local console administrators
- Two-level security by specific SNMP read/write community
- Multiple login session
- Multiple access permission management
- SSH v1/v2
- SSL/TLS

### Network Management

- ZyXEL iStacking™, up to 24 switches managed by single IP address
- Web-based management
- Telnet CLI
- SNMP v1, v2, v3

- RS-232c Local console
- IP management: static IP or DHCP client
- RMON four RMON groups 1, 2, 3, 9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring, and analysis
- Port mirroring: supports Source/Destination/Both port mirroring

### Intelligent ACL (L2/L3/L4 Access List Control)

- Based on MAC address
- Based on VLAN
- Based on IP address
- Based on Protocol type
- Based on TCP/UDP type
- Based on DSCP

## Hardware Specifications

- Support of auto-negotiation
- Support of auto MDI/MDI-X
- Console: D-Sub 9 pin Female (DCE)
- Management: 1 out-of-band management RJ-45 port
- Ports: 48 1000BASE-T, copper ports + 4 dual-personality GbE ports (RJ-45 or SFP open slots) + 2 SFP open slot

## Physical Specifications

- 48 1000BASE-T copper ports + 4 dual-personality GbE ports + 2 SFP open slot
- Dimensions: 438 (W) x 300 (D) x 44.45 (H) mm
- Weight: 3.5 Kg



## Power Requirements

- Input voltage of AC: 100-240 VAC, 50/60 Hz
- Max power rating of AC: 60 Watt
- Backup power supply into 12 V DC

## Environmental Specifications

- Operating temperature: 0°C ~ 45°C
- Storage temperature: -25°C ~ 70°C
- Operating humidity: 20% ~ 95%, (non-condensing)

## Certification

- UL 60950-1
- CSA 60950-1
- EN 60950-1
- IEC 60950-1

For more product information, visit us on the web at [www.ZyXEL.com](http://www.ZyXEL.com)



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